

Claims 1 – 2 (canceled).

Claim 3 (currently amended): A process for removing SO₂, NO, and NO₂ from a gas stream comprising the steps of

- a. oxidizing at least a portion of NO in a gas stream to NO₂ with a dielectric barrier discharge reactor resulting in a mole ratio of SO₂ to NO₂ of at least 2.5 to 1, followed by
- b. scrubbing at least a portion of SO₂, NO, and NO₂ from the gas stream with a scrubbing solution
comprising ammonia and
having a pH between 6 and 8, and
- c. removing at least a portion of any ammonia aerosols generated from the scrubbing step from the gas stream with an aerosol removal means.

~~The process of claim 2, wherein said electrical discharge reactor is a dielectric barrier discharge reactor.~~

Claims 4 – 12 (canceled).

Claim 13 (currently amended): A process for removing SO₂, NO, NO₂, and Hg from a gas stream

comprising the steps of

a. oxidizing at least a portion of the NO in a gas stream to NO₂, and at least a portion of the Hg in a gas stream to HgO, with a dielectric barrier discharge reactor,

followed by

b. scrubbing at least a portion of the SO₂, NO, and NO₂ from the gas stream with a scrubbing solution

comprising ammonia, and

having a pH between 6 and 8, and

c. removing at least a portion of any ammonia aerosols generated from the scrubbing step, and HgO, from the gas stream with an aerosol removal means.

~~The process of claim 12, wherein said electrical discharge reactor is a dielectric barrier discharge reactor.~~

Claims 14 – 29 (canceled).